In the Claims

The status of claims in the case is as follows:

1   1.   [Currently amended]   A method for <u>executing full</u>

2   character interactive input/output <u>mode communication at the</u>

3   <u>application level of a TCP/IP protocol stack</u> in a half

4   duplex block mode environment <u>requiring a half duplex block</u>

5   <u>mode interface</u> ~~, including~~ <u>between</u> a client workstation and

6   a server, comprising the steps of:

7   <u>operating said client to communicate in said</u>

8   <u>application level over said half duplex block mode</u>

9   <u>interface with a first server application written with</u>

10   <u>half-duplex block mode architecture in half-duplex</u>

11   <u>block mode;</u>

12   <u>operating said client to communicate over said half</u>

13   <u>duplex block mode interface with a second server</u>

14   <u>application requiring full duplex character interactive</u>

15   <u>mode by:</u>

16   receiving a key stroke into a buffer at said

17   client workstation;

18   automatically transferring said keystroke from
19   said client workstation over a 1/2 a half duplex
20   block mode interface to a full duplex character
21   interactive input/output server application; and

22   said full duplex character interactive
23   input/output server application processing said
24   keystroke and responding appropriate to context of
25   said full duplex character interactive server
26   application;

27   thereby transferring single key strokes as they are
28   entered at said client workstation even though
29   operating in said half duplex block mode environment in
30   which character sequences are normally transferred.

31   2.   [Original] The method of claim 1, said buffer being an
32   auto enter, non-display entity on a display screen.

1   3.   [Previously presented] The method of claim 1, said
2   buffer being a non-screen entity accessible to said client
3   workstation.

1   4.   [Currently amended]   A method for character interactive

2   input/output in a half duplex block mode environment

3   including a client workstation and a server, comprising the

4   steps of:

5   connecting said client workstation ~~to said~~ <u>a first</u>

6   server <u>application written to half-duplex block mode</u>

7   <u>architecture</u>;

8   <u>operating said client to communicate a half duplex</u>

9   <u>block mode interface said first server application in</u>

10   <u>half-duplex block mode</u>;

11   <u>connecting said client workstation to a second server</u>

12   <u>application written to full duplex character</u>

13   <u>interactive mode architecture</u>;

14   <u>operating said client to communicate over said half</u>

15   <u>duplex block mode interface with said second server</u>

16   <u>application in full duplex character interactive mode</u>

17   <u>by</u>:

18   defining a workstation display <u>at said client</u>

19   <u>workstation</u> as a 1-byte character input field that

20   has auto-enter and non-displayable attributes

21   operating in said half duplex block mode;

22   receiving a keystroke into said input field;

23   automatically transferring said keystroke from

24   said workstation display to a server application;

25   and

26   said server application processing said keystroke

27   and responding appropriate to context of said

28   server application;

29   thereby transferring single key strokes as they are

30   entered at said client workstation even though

31   operating in said half duplex block mode environment in

32   which character sequences are normally transferred.

1   5.   [Previously presented] The method of claim 4, further

2   comprising the steps of:

3   communicating an attention signal from said client

4   workstation; and

5   responsive to said attention signal, communicating said

6   keystroke from said workstation display to said server

7   application.

1   6.   [Currently amended] The method of claim 4, said client

2   workstation and server together ~~becoming~~ forming a cascaded

3   client to a targeted application server that requires

4   character dependent input/output in full duplex mode.

1   7.   [Previously presented] The method of claim 4, further

2   comprising the step preventing display of said input

3   character on said workstation display.

1   8.   [Previously presented] The method of claim 4, further

2   comprising the step of operating said client workstation and

3   providing for translation of said character from EBCDIC to

4   ASCII.

1   9.   [Currently amended] A method for character interactive

2   input/output in a half duplex block mode environment,

3   comprising the steps of:

4   connecting a client to a first server application

5   written to half-duplex block mode architecture;

6   operating said client to communicate over a half duplex

7   block mode interface to said first server application

8   in half-duplex block mode;

9   connecting said client to a second server application

10   written to full duplex character interactive mode

11   architecture;

12   operating said client to communicate over said half

13   duplex block mode interface with said second server

14   application in full duplex character interactive mode

15   by:

16   configuring a workstation display device at a

17   client workstation to a one character field; and

18   immediately upon entry of an input character into

19   said one character field, processing said input

20   character by signaling an attention identifier

21   from a client emulator application, and responsive

22   to said attention identifier, retrieving said

23   input character from said one character field;

24   thereby transferring single key strokes as they are

25   entered at said one character field even though

26   operating in said half duplex block mode environment in

27   which character sequences are normally transferred.

1   10.   [Previously presented] The method of claim 9, further

2   comprising the step of translating and communicating said

3   input character to a remote server and application for

4   interpretation within the context of said remote

5   application.

1   11.   [Currently amended] The method of claim 10, further

2   comprising the step of returning from said remote

3   application to said client workstation a display character

4   for display at said workstation display <u>device</u>.

1   12.   [Previously presented] The method of claim 11, said

2   display character selectively comprising an echo character

3   which may be said input character.

1   13.   [Currently amended] A method for operating a client

2   application in character interactive input/output mode in a

3   half duplex block mode environment, comprising the steps of:

4   <u>connecting said client application to a first server</u>

5   <u>application written to half-duplex block mode</u>

6   <u>architecture;</u>

7   <u>operating said client application to communicate over a</u>

8   <u>half duplex block mode interface to said first server</u>

9   <u>application in half-duplex block mode;</u>

10   <u>connecting said client application to a second server</u>

11   <u>application written to full duplex character</u>

12   <u>interactive mode architecture;</u>

13   <u>operating said client application to communicate over</u>

14   <u>said half duplex block mode interface with said second</u>

15   <u>server application in full duplex character interactive</u>

16   <u>mode by:</u>

17   responsive to receiving an attention command from

18   a keyboard, retrieving from a one character

19   display buffer configured as an auto-entry

20   non-displayable display a single input character;

21   and

22   translating and communicating said input character

23   to a remote application for interpretation within

24   the context of said remote application;

25   thereby transferring single key strokes as they

26   are entered at said keyboard even though operating

27   in said half duplex block mode environment in

28   which character sequences are normally

29   transferred.

1   14.   [Currently amended] A method for operating a display

2   operating in a half duplex block mode environment,

3   comprising the steps of:

4   connecting a client application to a first server

5   application written to half-duplex block mode

6   architecture;

7   operating said client application to communicate over a

8   half duplex block mode interface to said first server

9   application in half-duplex block mode;

10   connecting said client application to a second server

11   application written to full duplex character

12   interactive mode architecture;

13   operating said client application to communicate over

14   said half duplex block mode interface with said second

15   server application in full duplex character interactive

16   mode by:

17   configuring said display with respect to a

18   character entry device as a one character,

19   auto-entry, non- displayable buffer;

20   responsive to entry of an input character into

21   said one character, auto-entry, non-displayable

22   buffer, immediately communicating said input

23   character to a remote application for

24   interpretation;

25   thereby transferring single key strokes as they are

26   entered at said one character, auto-entry, non-

27   displayable buffer even though operating in said half

28   duplex block mode environment in which character

29   sequences are normally transferred.

1   15. [Previously presented] The method of claim 14, further

2   comprising the steps of:

3   receiving from said remote application an echo

4   character selectively not said input character; and

5   displaying said echo character.

1   16. [Currently amended] A system for performing character

2   interactive input/output in a half duplex block mode

3   environment including a <u>client</u> workstation and a server,

4   comprising:

5   <u>said client workstation including a client application</u>

6   <u>selectively connected to a first server application</u>

7   <u>written to half-duplex block mode architecture and to a</u>

8   <u>second server application written to full duplex</u>

9   <u>character interactive mode architecture;</u>

10   <u>said client application for communicating over a half</u>

11   <u>duplex block mode interface to said first server</u>

12   <u>application in half-duplex block mode;</u>

13   <u>said client application for communicating over said</u>

14   half duplex block mode interface with a second server

15   application in full duplex character interactive

16   input/output mode including:

17   a display buffer for receiving a key stroke;

18   ~~a client for~~ said client application automatically

19   transferring said key stroke from said workstation

20   ~~over a~~ over said half duplex block mode interface

21   ~~to a full duplex character interactive~~

22   ~~input/output~~ said second server application;

23   said ~~full duplex character interactive~~ second

24   server application for processing said keystroke

25   and responding appropriate to context of said

26   server application;

27   thereby transferring single key strokes as they

28   are entered at said client workstation even though

29   operating in said half duplex block mode

30   environment in which character sequences are

31   normally transferred.

1   17.   [Currently amended]   A system including a workstation

2   and a server for character interactive input/output in a

3   half duplex block mode environment, comprising:

4   a network for connecting said workstation to said

5   server;

6   said workstation including a client application;

7   a first server application written to half-duplex block

8   mode architecture;

9   said client application for communicating over a half

10   duplex block mode interface to said first server

11   application in half-duplex block mode;

12   a second server application written to full duplex

13   character interactive mode architecture;

14   said client application for communicating over said

15   half duplex block mode interface with said second

16   server application in full duplex character interactive

17   mode including:

18   a workstation display configured as a 1-byte

19   character input field that has auto-enter and

20   non-displayable attributes;

21   a keyboard for entering a keystroke into said

22   input field;

23   said workstation automatically transferring each

24   said keystroke from said workstation display to a

25   server application; and

26   said server application for processing said

27   keystroke and responding to said workstation with

28   an echo character appropriate to context of said

29   server application for display at said workstation

30   display;

31   thereby transferring single key strokes as they

32   are entered at said workstation even though

33   operating in said half duplex block mode

34   environment in which character sequences are

35   normally transferred.

1   18. [Currently amended] A system for character interactive

2   input/output in a half duplex block mode environment,

3   comprising:

4   a first server application written to half-duplex block

5   mode architecture;

6   a client application for communicating over a half

7   duplex block mode interface to said first server

8   application in half-duplex block mode;

9   a second server application written to full duplex

10   character interactive mode architecture;

11   said client application for communicating over said

12   half duplex block mode interface with said second

13   server application in full duplex character interactive

14   mode including:

15   a workstation display device configured as a one

16   character field;

17   ~~a server; and~~

18   a client emulator application responsive

19   immediately upon entry of an input character into

20   said one character field, for retrieving and

21   communicating to said server <u>over said half duplex</u>

22   <u>block mode interface</u> said input character from

23   said one character field, and responsive to said

24   server for displaying at said display device an

25   echo character selectively different from said

26   input character;

27   thereby transferring single input characters as they

28   are entered at said one character field even though

29   operating in said half duplex block mode environment in

30   which character sequences are normally transferred.

1   19. [Currently amended] A display for character

2 interactive input/output in a half duplex block mode

3 environment <u>in which client applications at a client</u>

4 <u>workstation selectively communicates with a first server</u>

5 <u>application over a half duplex block mode interface in half</u>

6 <u>duplex block mode and with a second server application in</u>

7 <u>via said half duplex block mode interface in full duplex</u>

8 <u>character interactive mode, said client workstation</u>,

9 comprising:

10   a one character, auto-entry, non-displayable buffer for

11   receiving from an input device an input character for

12   communication to a server application; and

13   an output field for displaying an echo character from

14   said server application;

15   thereby transferring single key strokes as they are

16   entered at said input device even though operating in

17   said half duplex block mode environment in which

18   character sequences are normally transferred.

1   20.   [Currently amended] A program storage device readable

2   by a machine, tangibly embodying a program of instructions

3   executable by a machine to perform method steps for

4   character interactive input/output in a half duplex block

5   mode environment including a workstation and a server, said

6   method steps comprising:

7   operating said workstation to communicate a half duplex

8   block mode interface with a first server application

9   written with half-duplex block mode architecture in

10   half-duplex block mode;

11   operating said workstation to communicate over said

12 <u>half duplex block mode interface with a second server</u>

13 <u>application requiring full duplex character interactive</u>

14 <u>mode by</u>:

15   receiving a key stroke into a buffer at said

16   workstation;

17   automatically transferring said key stroke from

18   said workstation to a server application;

19   said server application processing said keystroke

20   and responding appropriate to context of said

21   server application;

22   thereby transferring single key strokes as they

23   are entered at said buffer even though operating

24   in said half duplex block mode environment in

25   which character sequences are normally

26   transferred.

1   21. [Currently amended] A program storage device readable

2   by a machine, tangibly embodying a program of instructions

3   executable by a machine to perform method steps for

4   character interactive input/output in a half duplex block

5   mode environment including a workstation and a server, said

6   method steps comprising:

7   connecting said client workstation to said server <u>over</u>

8   <u>a half duplex block mode interface</u>;

9   <u>communicating with said server over said half duplex</u>

10   <u>block mode interface selectively according to half</u>

11   <u>duplex block mode and full duplex character interactive</u>

12   <u>input/output mode</u>;

13   <u>when communicating with said server in said full duplex</u>

14   <u>character interactive input/output mode,</u>

15   defining a workstation display as a 1-byte

16   character input field that has auto-enter and

17   non-displayable attributes;

18   receiving a keystroke into said input field;

19   automatically transferring said keystroke from

20   said workstation display to a server application;

21   said server application processing said keystroke

22   and responding appropriate to context of said

23   server application;

24   thereby transferring single key strokes as they

25   are entered at said client workstation even though

26   operating in said half duplex block mode

27   environment in which character sequences are

28   normally transferred.

1   22.   [Currently amended] A program storage device readable

2   by a machine, tangibly embodying a program of instructions

3   executable by a machine to perform method steps for

4   character interactive input/output in a half duplex block

5   mode environment, said method steps comprising the steps of:

6   operating a client to communicate over a half duplex

7   block mode interface with a first server application

8   written with half-duplex block mode architecture in

9   half-duplex block mode;

10   operating said client to communicate over said half

11   duplex block mode interface with a second server

12   application requiring full duplex character interactive

13   mode by:

14   configuring a workstation display device to a one

15   character field; and

16   immediately upon entry of an input character into

17   said one character field, processing said input

18   character by signaling an attention identifier to

19   a client emulator application, and responsive to

20   said attention identifier, retrieving said input

21   character from said one character field;

22   thereby transferring single input characters as

23   they are entered at said one character field even

24   though operating in said half duplex block mode

25   environment in which character sequences are

26   normally transferred.

1   23.   [Currently amended]   A program storage device readable

2   by a machine, tangibly embodying a program of instructions

3   executable by a machine to perform method steps for

4   operating a client application in character interactive

5   input/output mode in a half duplex block mode environment,

6   said method steps comprising the steps of:

7   operating said client application to communicate over a

8   half duplex block mode interface with a first server

9   application written with half-duplex block mode

10   architecture in half-duplex block mode;

11   operating said client to communicate over said half

12   duplex block mode interface with a second server

13   application requiring full duplex character interactive

14   mode by:

15   responsive to receiving an attention command from

16   a keyboard, retrieving from a one character

17   display buffer configured as an auto-entry

18   non-displayable display a single input character;

19   and

20   translating an communicating said input character

21   to a remote application for interpretation within

22   the context of said remote application;

23   thereby transferring single key strokes as they

24   are entered at said keyboard even though operating

25   in said half duplex block mode environment in

26   which character sequences are normally

27   transferred.

1   24.   [Currently amended]   A program storage device readable

2   by a machine, tangibly embodying a program of instructions

3   executable by a machine to perform method steps for

4   operating a display in a half duplex block mode environment

5   selectively in half duplex block mode and in full duplex

6   character interactive input/output mode using an application

7   layer half duplex block mode interface, when communicating

8   in said full duplex character interactive input/output mode

9   said method steps comprising the steps of:

10   configuring said display with respect to a character

11   entry device as a one character, auto-entry, non-

12   displayable buffer;

13   responsive to entry of an input character into said one

14   character, auto-entry, non-displayable buffer,

15   immediately communicating said input character

16   to a remote application for interpretation;

17   thereby transferring single characters as they are

18   entered at said character entry device even though

19   operating in said half duplex block mode environment in

20   which character sequences are normally transferred.

1   25.   [Currently amended] A computer program product ~~or~~

2   ~~computer program element~~ for operating a display in a half

3   duplex block mode environment <u>selectively to communicate in</u>

4   <u>half duplex block mode and full duplex character interactive</u>

5   <u>mode</u> according to method steps <u>executed in full duplex</u>

6   <u>character interactive mode</u> comprising the steps of:

7   configuring said display with respect to a character

8   entry device as a one character, auto-entry, non-

9   displayable buffer; and

10   responsive to entry of an input character into ~~said on~~

11   <u>said one</u> character, auto-entry, non-displayable buffer,

12   immediately communicating said input character

13   to a remote application <u>via an application layer half</u>

14   <u>duplex block mode interface</u> for interpretation;

15   thereby transferring single characters as they are

16   entered at said character entry device even though

17   operating in said half duplex block mode environment in

18   which character sequences are normally transferred.

1   26.   [Previously presented]   The method of claim 1, said

2   automatically transferring step further comprising the steps

3   of:

4   transferring said key stroke from said client

5   workstation to a Telnet client and thence to said full

6   duplex character interactive (I/O) server application

7   via a Unix server.

1   27.   [Previously presented]   The method of claim 4, said

2   automatically transferring step further comprising the steps

3   of:

4   transferring said key stroke from said client

5   workstation to a Telnet client and thence to said

6   server application via a Unix server.

1   28.   [Canceled]